

Hello,

We've finished the April 22, 2014 Bulletin 120 (B120) forecast update. The forecasts include observed conditions through the morning of April 22, 2014 and are posted at <http://cdec.water.ca.gov/cgi-progs/iudir?s=b120up>.

Forecast Summary:

Considering the rivers forecasted in the B120 update, the projected median April-July runoff in the major Sierra river basins ranges from 9 percent on the Tule River to 48 percent for the Inflow to Shasta Lake. On average, the forecasts dropped 3 percent from the April 15 forecast (the same percentage drop as with the previous update). The forecasts in the Sacramento, San Joaquin, and Tulare hydrologic regions dropped 3, 3, and 2 percent, respectively. The largest drops of 4 percent were forecast on the Yuba, Mokelumne, and Merced rivers. The same three hydrologic regions have April-July forecasts of 36, 32, and 26 percent of average.

Runoff:

The flows so far in April are equal to or greater than 50 percent of average from the American River northward and in the Mokelumne, Stanislaus, Tuolumne, and Kings rivers. The Yuba, American, Mokelumne and Tuolumne rivers are flowing at rates equal to or greater than 60 percent of average. The clear pattern of increased flows that was evident in rivers south of the Stanislaus for the week ending April 15 has not persisted. Some recession has been seen in these rivers during the most recent week.

Precipitation:

Negligible precipitation was measured in the Northern Sierra 8-Station (8SI) and San Joaquin 5-Station (5SI) Indexes during the last week.

As of April 22, the 8SI registered 1.1 inch for the month. The seasonal precipitation is about 26.8 inches which represent 60 percent of average to date and 54 percent of an average water year.

As of April 22, the 5SI registered 1.3 inches for the month. The seasonal precipitation is about 16.3 inches which represents 45 percent of average to date and 40 percent of an average water year.

Snowpack:

As of April 22, the snow sensor data indicates that the northern, central, and southern Sierra snowpack are at 8, 22, and 17 percent of average, respectively. The statewide snow water content stands at only 4 inches which is 17 percent of normal. Only three weeks after the date of normal maximum snow accumulation, all pillows in the Feather basin are bare except Gold Lake and Bucks Lake. In the Central and Southern Sierra, a large majority of pillows below about 8,000 feet are bare.

Weather and Climate Outlook:

The forecast for the next six days shows precipitation Friday and Saturday over all regions of the Sierra. Up to 1 ¼ inches is expected from the American River northward and less than an inch is forecast over the central and southern range. The freezing levels are expected to drop to near 6,000 feet over the northern range and to near 6,500 feet over the central and southern Sierra. The noteworthy part of the forecast is that the freezing levels are expected to rise significantly after Saturday. **By Tuesday, the levels should be above 12,500 feet over most of the Sierra.**

The NWS Climate Prediction Center's (CPC) one-month outlook for May, updated April 17, suggests increased chances of above normal temperatures for all of the State. The same outlook predicts equal chances of above and below normal precipitation for the Sierra and the Colorado River region.

The CPC's three-month outlook (May-July), updated April 17, suggests increased chances of above normal temperatures for all of California. The same outlook predicts equal chances of above and below normal precipitation for the Sierra and the Colorado River region.

ENSO-neutral conditions continue in the equatorial Pacific. While neutral conditions are expected during spring 2014, the chances of an El Nino developing by summer exceed 50 percent.

Next Update:

The next Bulletin 120 and Water Supply Index forecast, for conditions on May 1, 2014, will be available May 8, 2014.

If you have any questions regarding this forecast, please contact a member of the Snow Surveys staff. We are happy to help.